

**This Page Is Inserted by IFW Operations  
and is not a part of the Official Record**

## **BEST AVAILABLE IMAGES**

**Defective images within this document are accurate representations of the original documents submitted by the applicant.**

**Defects in the images may include (but are not limited to):**

- **BLACK BORDERS**
- **TEXT CUT OFF AT TOP, BOTTOM OR SIDES**
- **FADED TEXT**
- **ILLEGIBLE TEXT**
- **SKEWED/SLANTED IMAGES**
- **COLORED PHOTOS**
- **BLACK OR VERY BLACK AND WHITE DARK PHOTOS**
- **GRAY SCALE DOCUMENTS**

**IMAGES ARE BEST AVAILABLE COPY.**

**As rescanning documents *will not* correct images,  
please do not report the images to the  
Image Problem Mailbox.**

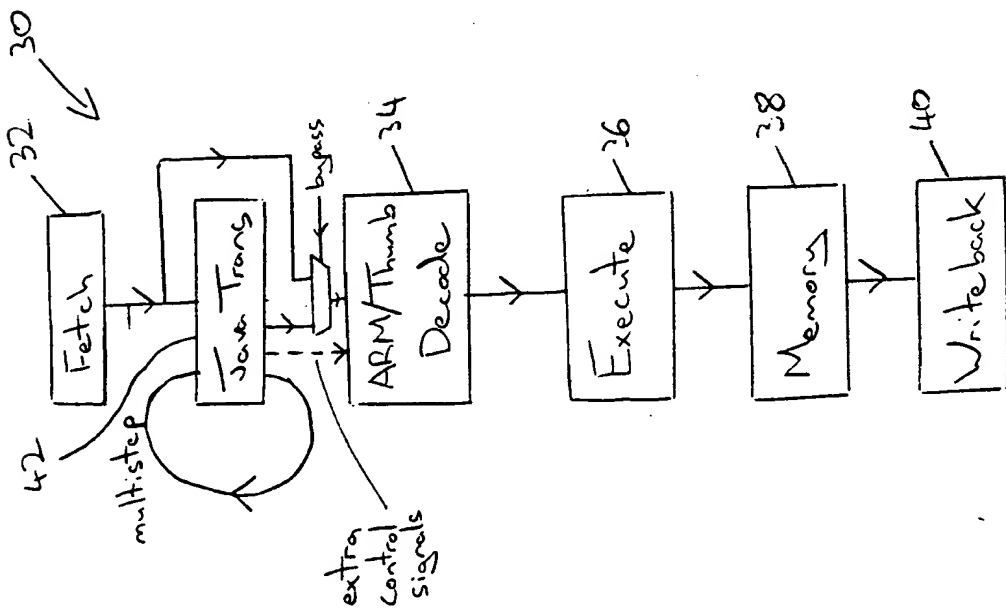


Fig. 1

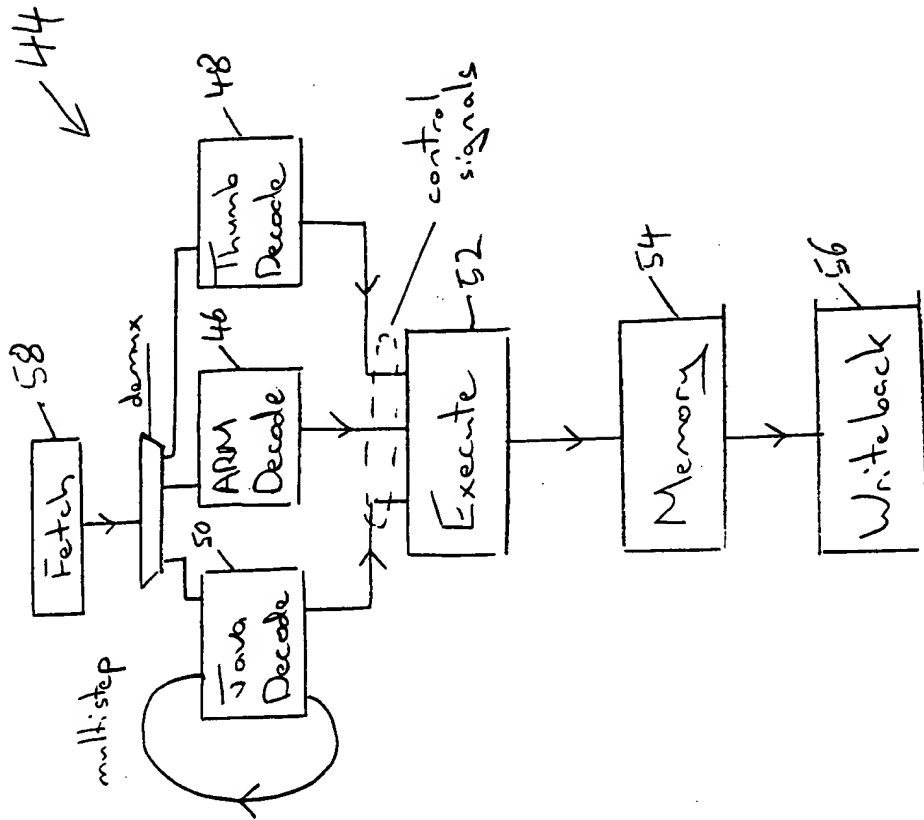


Fig. 2

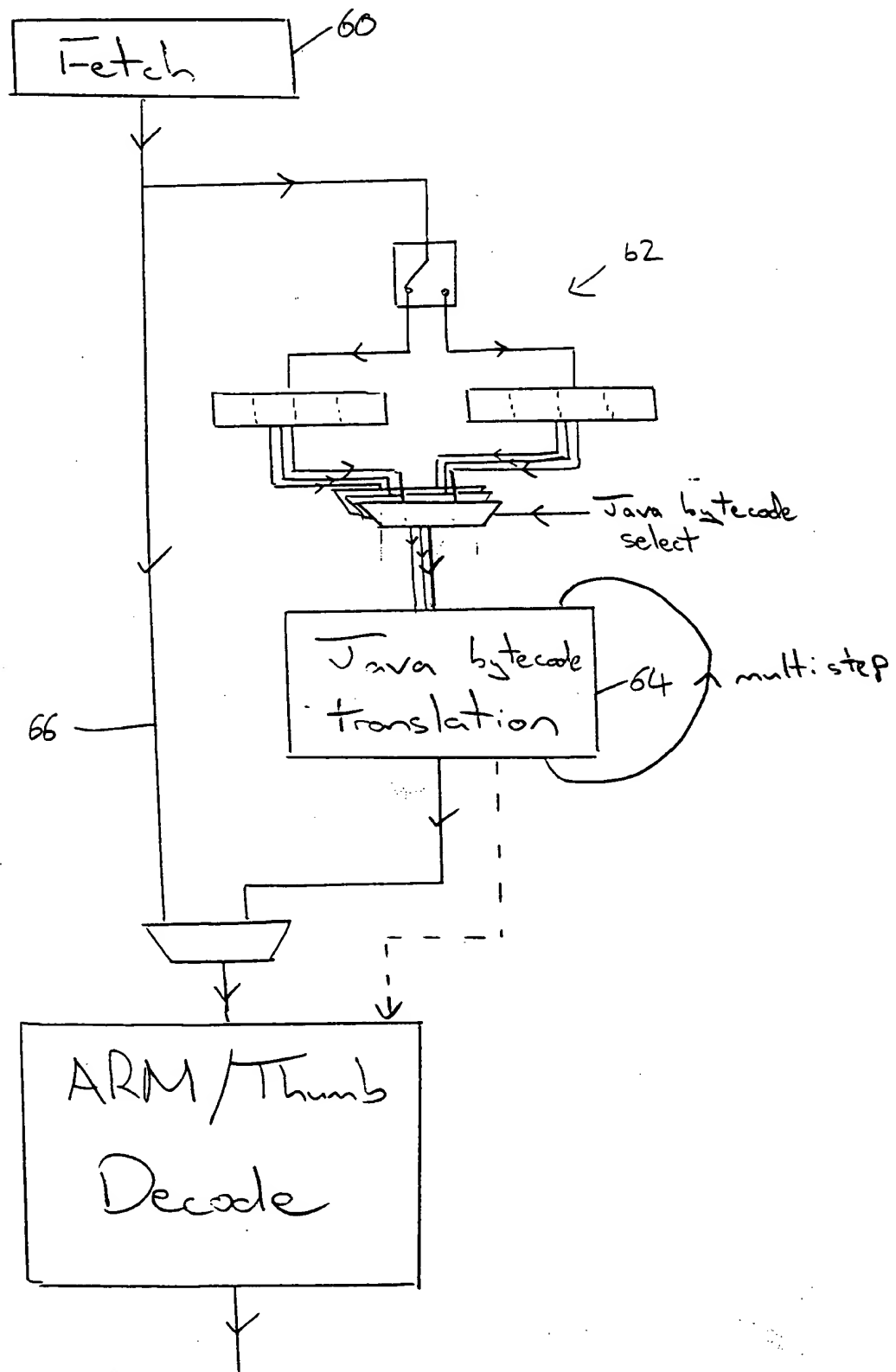


Fig. 3

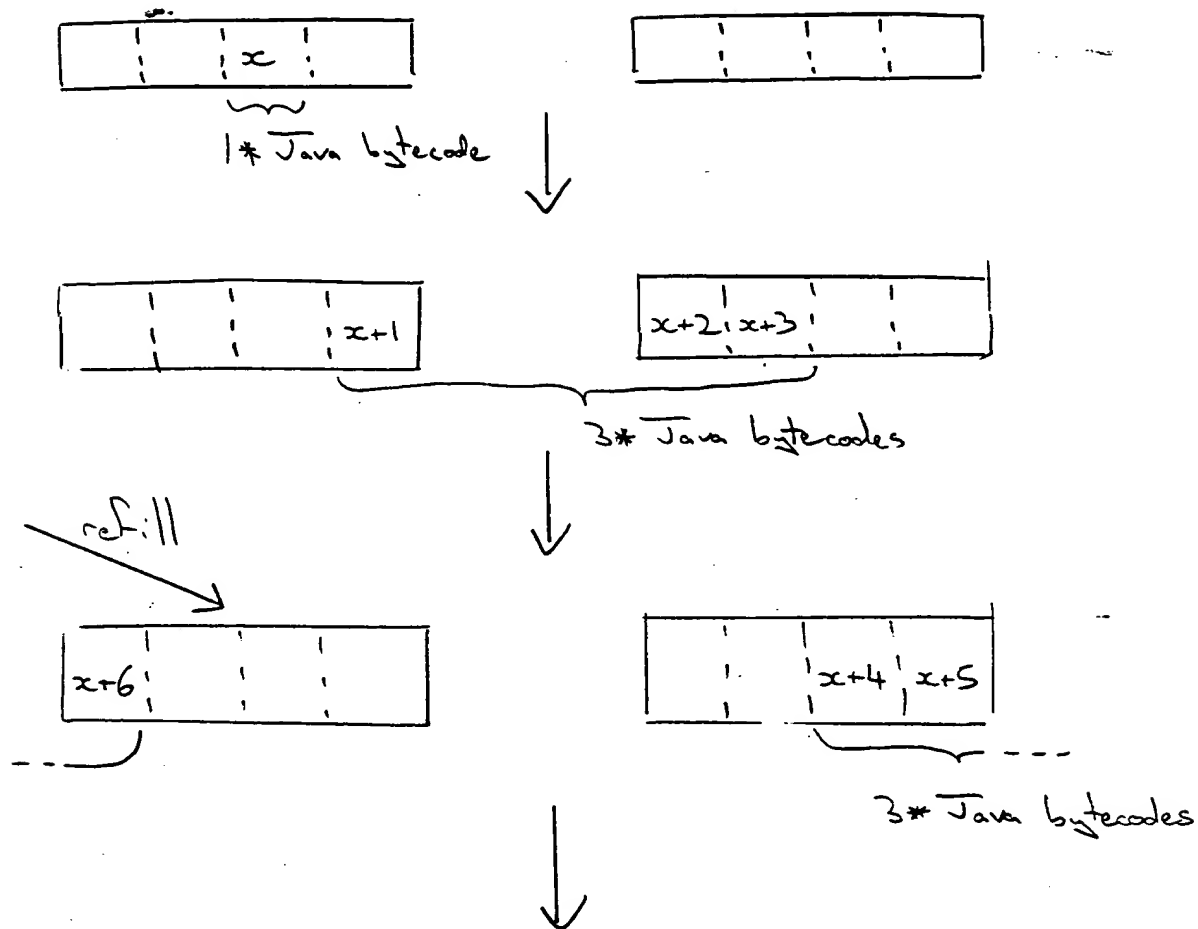


Fig. 4

102

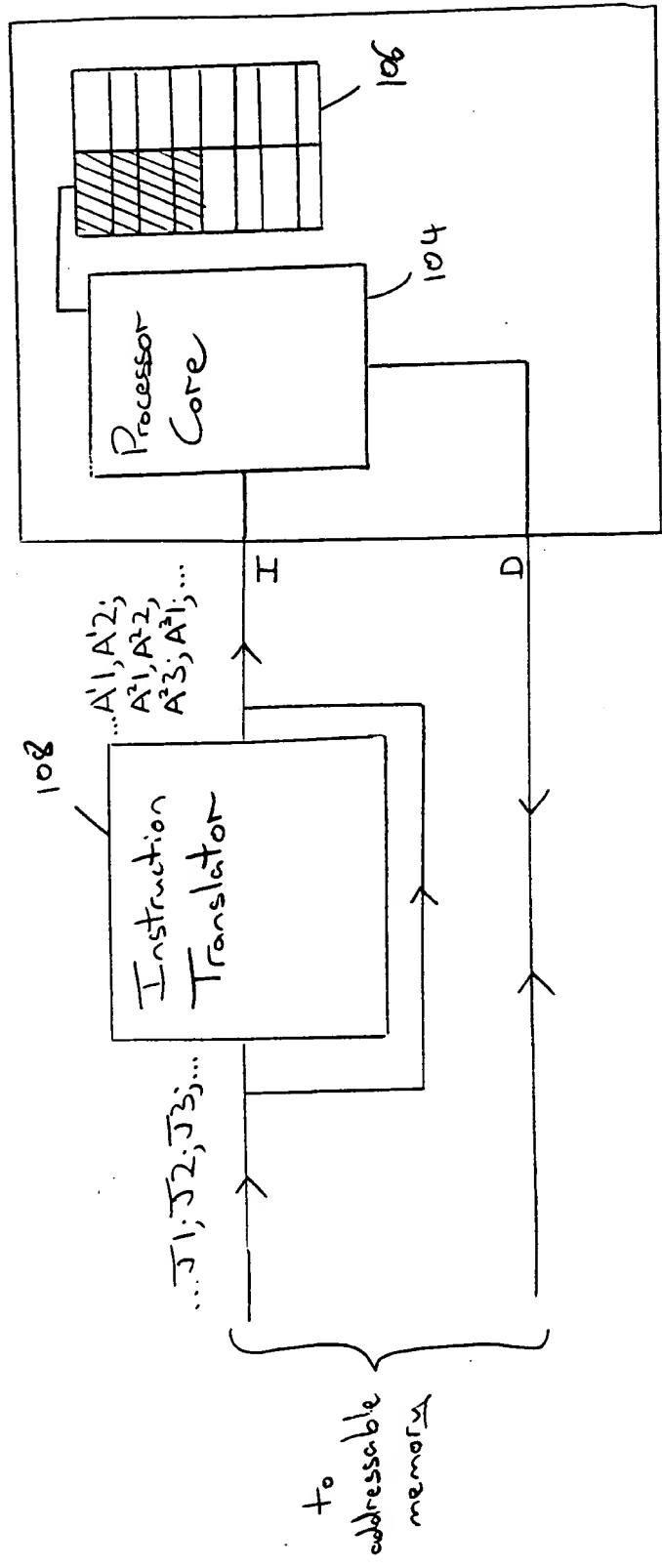


Fig. 5

Fig. 6

Java Instruction	$\text{load}$ (RF=2, RF>0)	$\text{load}$ (RF=2, RF>1)	$\text{load}$ (SA=-1)
ARM Instruction(s)	$\nearrow$ LDR R0[Rstack, #4]! (POP)	LDR R3[Rstack, #4]! (POP)	ADD R3, R3, R0 $\nearrow$
State	00000	00100	01000
R0	E	SOA TOS	SOA TOS
R1	E	E	E
R2	E	E	E
R3	E	E	(SOA+SOB) TOS

Java Instruction	$\text{load}$ (RF=0, RE=2)	$\text{load}^2$ (RF=0, RE>2)	$\text{load}^2$ (RF=0, RE=2)
ARM Instructions	$\nearrow$ LDR R1, [Rvars, #4] LDR R0, [Rvars, #0] $\searrow$	$\nearrow$ STR R3, [Rstack, #4] (PUSH) $\searrow$	LDR R3, [Rvars, #4] LDR R2, [Rvars, #0] $\searrow$
State	00111	01101	01001
R0	E	SOA TOS-1	SOA TOS-1
R1	E	SOA TOS	SOA TOS-2
R2	E	E	SOA TOS-1
R3	(SOA+SOB) TOS	(SOA+SOB) TOS-2	SOA TOS

load  
 RF=2    SA=0  
 RE=2    (swap)

01001	
Array Ref	TOS-1
Index	TOS
	E
	E

LDR R12, [R0, #0]  
 LDR R2, [R12, R1, LSL #3]!

01001	
Array Ref	TOS-1
Index	TOS
1st Array Word	E
	E

01011	
Array Ref	E
Index	E
1st Array Word	TOS-1
2nd Array Word	TOS

LDR R3, [R12, #4]  
 (state swap)

Fig. 7

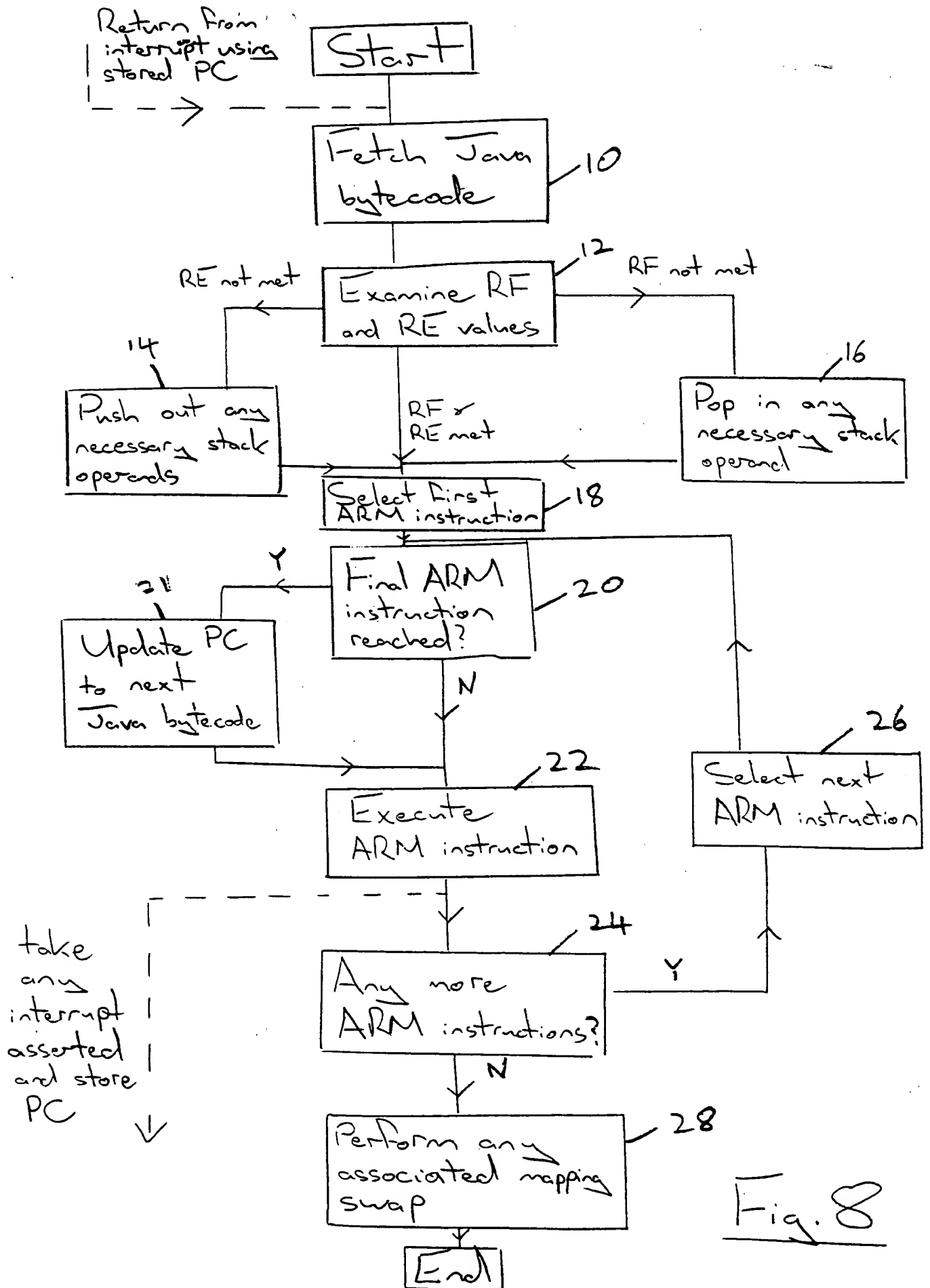


Fig. 8



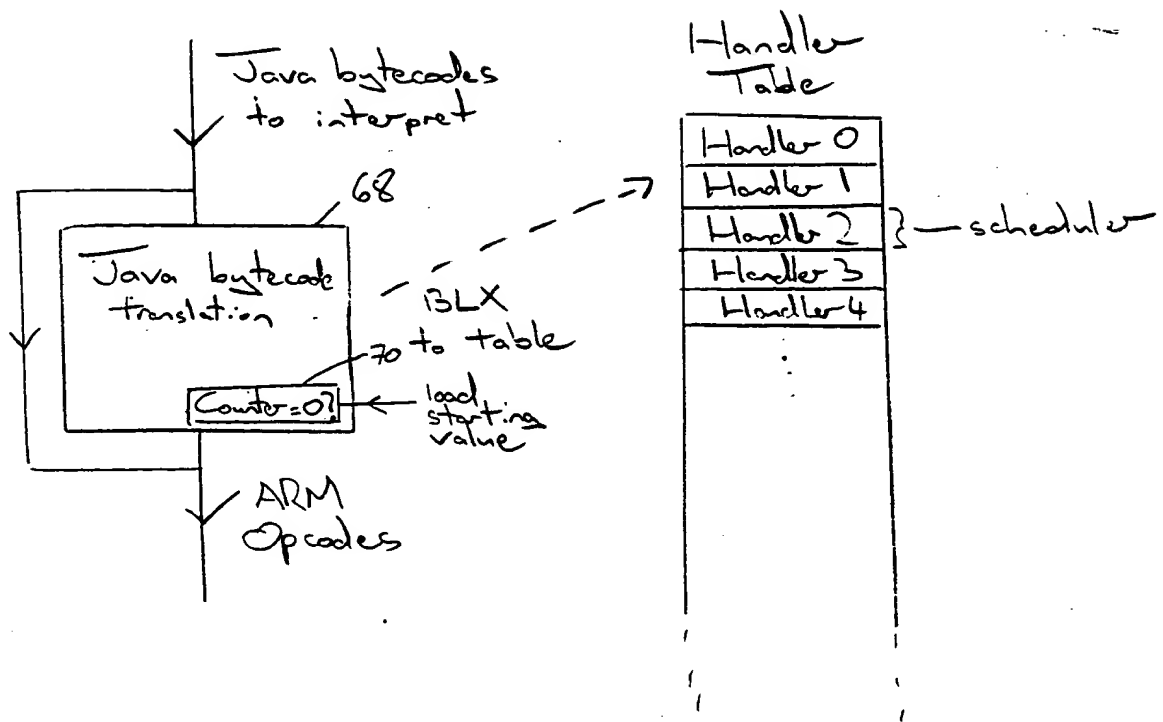


Fig. 9

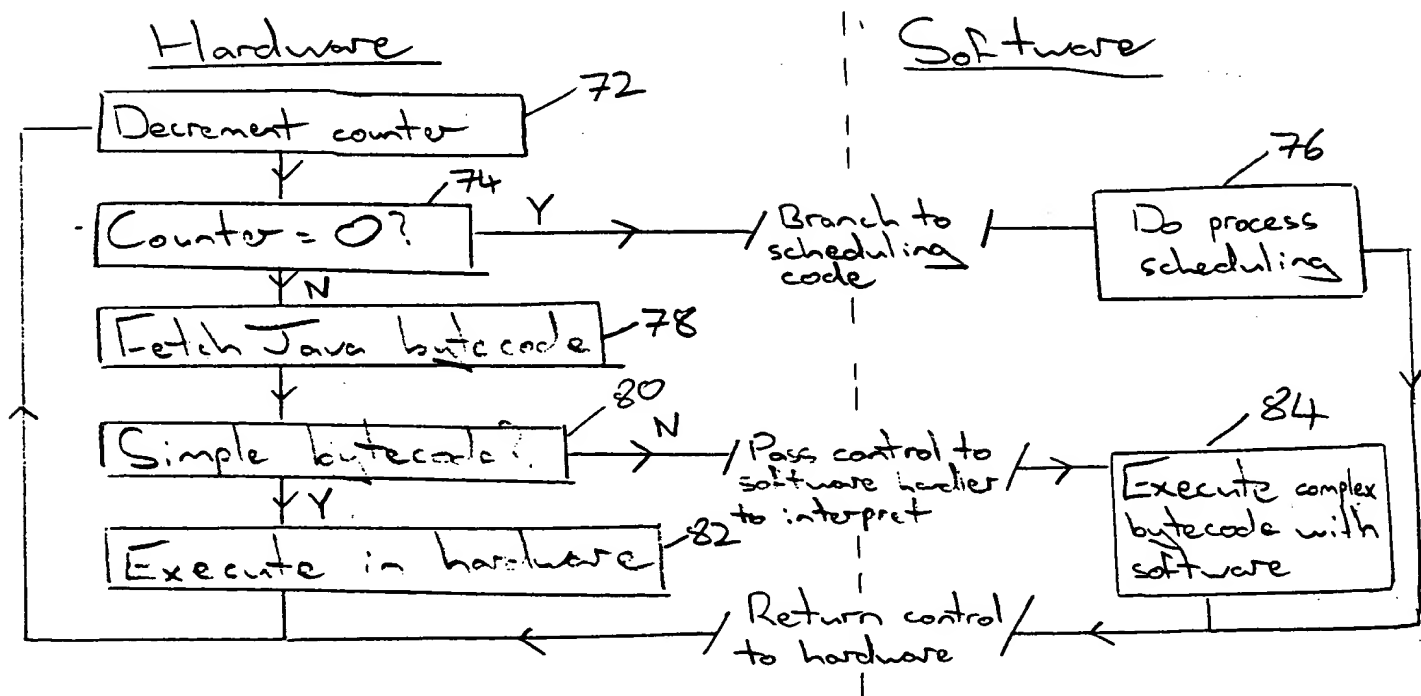


Fig. 10

## Hardware

## Software

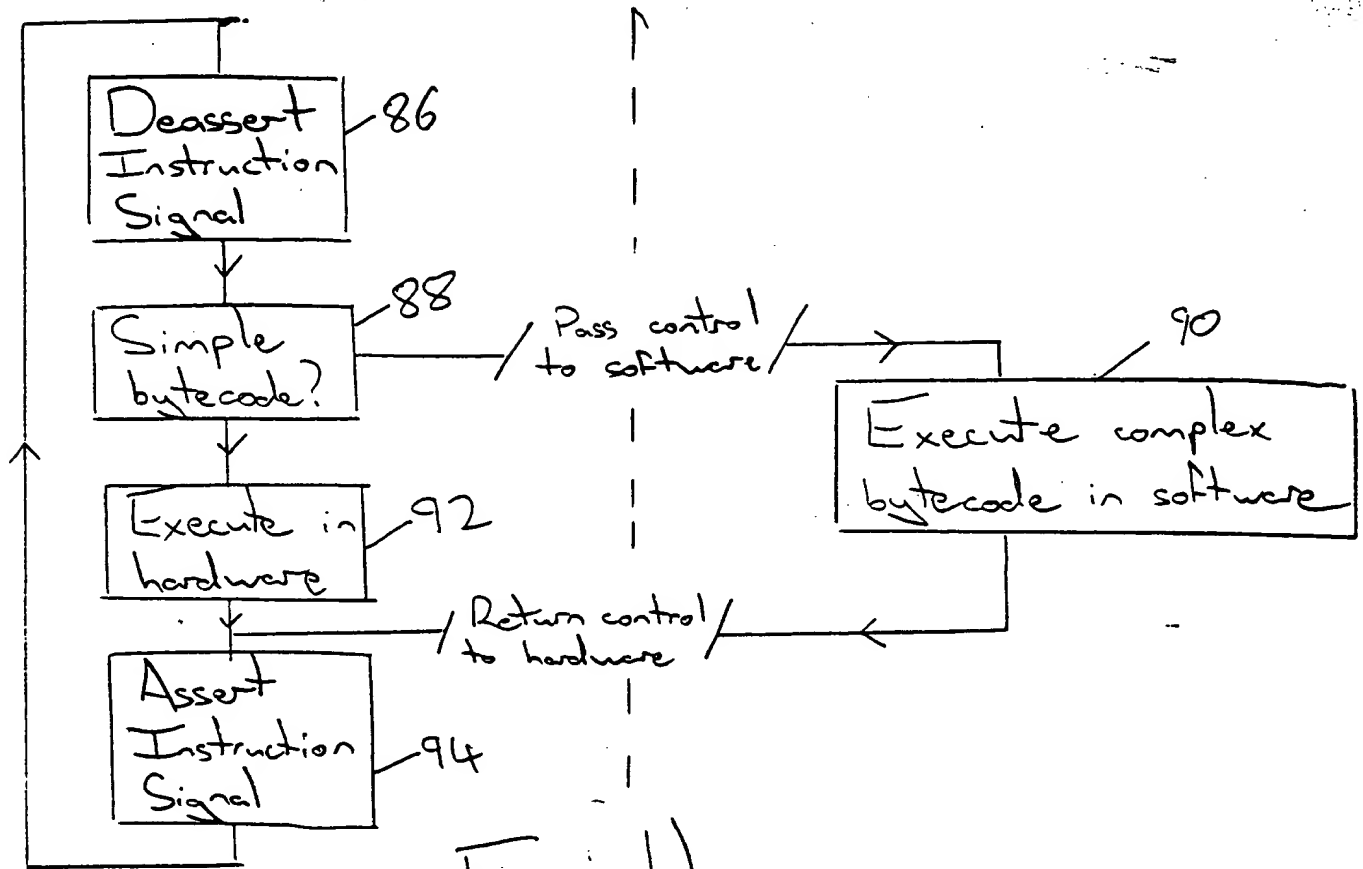


Fig. 11

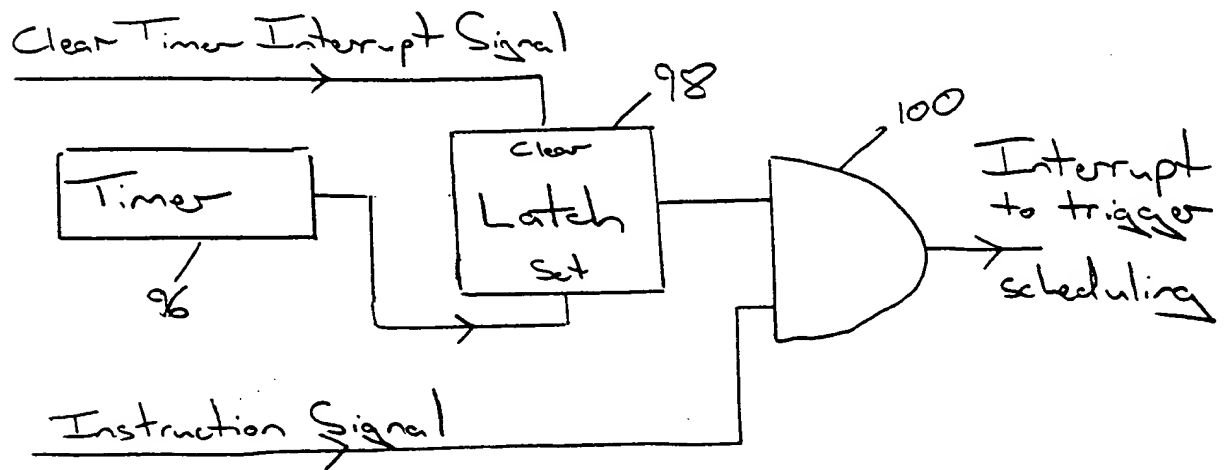


Fig. 12

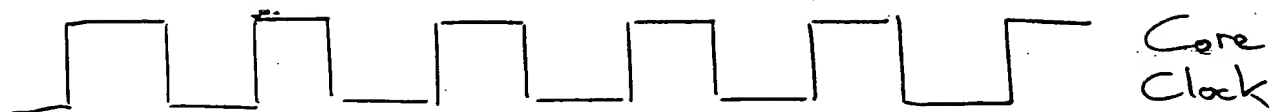


Fig. 13